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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,409	09/30/2003	James Douglas Mollenkopf	CRNT-0206	6510

23377 7590 08/24/2004  
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EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT PAPER NUMBER

2636

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/675,409	MOLLENKOPF, JAMES DOUGLAS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Julie Lieu	2636	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/30/03</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-20, and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 6,172,597).

Claims 1 and 17:

Referring to fig. 2, Brown discloses a system and method communicatively coupling power line communication (PLC) devices to a first and a second overhead power line conductor that travel in substantially parallel physical arrangement and in a spaced-apart relation, the method comprising:

- a. Coupling a first PLC device A to the first power line conductor at a first location
- b. Coupling a second PLC device B to the first power line conductor at a second location
- c. Coupling a third PLC device D to the second power line conductor at the third location

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In this system, the distance from the third location and the first location is not less than the distance from the first location to the second location and the distance from the third location to the second location is not less than the distance from the first location to the second location. However, the distance between the PLC devices is only a matter of choice in design depending on its application. Therefore, this arrangement would not constitute novelty or inventive step.

Claims 2, 3, 18, and 10:

Brown fails to show coupling of a fourth PLC to the second power line conductor. However, this is a choice in design depending on the application of the system as to what devices and/or how many devices are needed to be coupled the power line and how they would be arranged. Therefore, one skilled in the art would couple a fourth PLC device to the second power line conductor as applicable. Again, regarding the distance between the coupling locations, same discussion as above applies.

Claims 4 and 20:

The third PLC device forms part of a data path bypassing a transformer.

Claims 7 and 23:

The first PLC device A comprises first modem.

Claims 8 and 24:

The first PLC device A further comprises a router in communication with the first modem.

Claims 9 and 25:

The first PLC device A further comprises a wireless transceiver in communication with the first modem.

Claims 10 and 26:

The first PLC device A in Brown is configured to perform media access control processing.

Claim 11:

It is inherent that the first and second power line conductor carry different phases of a power signal.

Claim 12:

The first and second power line in Brown carry voltages greater than 1kV.

Claims 13 and 15:

The use of inductive coupling to couple a PLC device to a power line is conventional in the art. Therefore, a skilled artisan would have readily recognized using inductive coupling in Brown because it is old and well known in the art.

Claim 14:

Toroidal shaped core used as inductive coupler is old and conventional in the art. Thus, this claim feature would not constitute an inventive step.

Claim 16:

The third PLC device C in Brown communicates with the second PLC device B.

Claim 27:

Referring to fig. 2, Brown discloses a system and method communicatively coupling power line communication (PLC) devices to a first and a second overhead power line conductor that travel in substantially parallel physical arrangement and in a spaced-apart relation, the method comprising:

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- a. Coupling a first PLC device A to the first power line conductor at a first location
- b. Coupling a second PLC device B to the first power line conductor at a second location
- c. Coupling a third PLC device D to the second power line conductor at the third location

In this system, the third location is not between the first and second locations. However, the location of PLC devices is only a matter of choice in design depending on its application. Therefore, this arrangement would not constitute novelty or inventive step.

3. Claims 5 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent No. 6,172,597) in view of Williams et al. (US Patent No. 6,404,773).

Claims 5 and 21:

The use of a backhaul device is well known in the art as shown in Williams et al. In light of this teaching, one skilled in the art would have readily recognize using a backhaul in the system of Brown's as desired.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Berkman et al. (US Application 2004/01235676).

The applied reference has a common invention with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 703-308-6738. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Hofsass can be reached on 703-305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long, sweeping flourish extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2636

Aug. 18, 04